

ABSTRACT

Consistent with a feature of the present invention, protection and working routes are determined by assigning administrative weight values to each route in a network. The administrative weight value of a route can correspond to the physical distance associated with that route. Once the administrative weight values are assigned, that route having the lowest administrative weight value is designated the working route. The protect route is next identified by reassigning administrative weight values to the remaining routes in the network. Those routes that share resources, such as a fiber bundle or conduit, with the working route are assigned high administrative weight values, while those routes independent of the working route are assigned administrative weight values corresponding to the physical distance of each route. That route having the lowest administrative weight value after working route selection is designated the protect route. Accordingly, by assigning high administrative weight values to routes sharing resources with the working route, those resource-sharing routes are not selected as protect routes. Suitable protect routes, therefore, can be identified quickly and efficiently.